

SH30 & SH45 SERIES POWER SUPPLIES USER MANUAL

Specifications

| Table 1: Technical Specification | ons |
|--|--|
| INPUT | |
| Input voltage range | 90-264 V ac; 120-300 V dc; single-phase |
| Frequency | 47–63 Hz |
| Inrush current | 40 A peak maximum (soft start) |
| Efficiency | Up to 85% at full load |
| Power factor | 0.99 typical |
| Turn-on time | Ac on 1.5 s typical, inhibit/enable 150 ms typical, configurable through I2C; 50 ms internal turn-on delay (dual output only) |
| Hold-up time | 10 ms minimum |
| AC OK | >5 ms early warning before outputs lose regulation, full cycle ride at 50 Hz, configurable through I ² C |
| OUTPUT | |
| Output voltage range | ±10% minimum for all outputs, user-adjustable pot, full adjustment range using I2C |
| Factory set point accuracy | 1% |
| I ² C output program accuracy | ±5% |
| Margining | ±4-6% nominal analog (single output module only) |
| Line/load regulation | 0.4% or 20 mV maximum (1% maximum for 1500 W module) |
| Ripple | RMS: 0.1% or 10 mV maximum; Pk-Pk: 1.0% or 50 mV maximum; bandwidth limited to 20 MHz |
| Dynamic response | <2% or 100 mV with 25% load step |
| Recovery time | Within 1% in <300 μs |
| Overcurrent protection | Single output module and main output of the dual output module 105–120% of rated output current. Aux output of dual output module 105–140% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shutdown features. Configurable through I ² C with load calibration required (except for 1500 W module). |
| Short-circuit protection | Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. |
| Overvoltage protection | Single output module: 2–5.5 V, 122–134%; 6–60 V, 110–120% Dual output module: 2–6 V, 122–134%; 8–28 V, 110–120% Triple output module: No overvoltage protection provided Configurable through I ² C |
| Thermal protection | All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through I2C |
| Remote sense | Up to 0.5 V drop (not available on triple output module) |
| Single wire parallel | Current share to within 2% of total rated current |
| DC OK | ±5% of nominal; configurable through I ² C |
| Minimum load | Not required |
| Housekeeping bias voltage | 5 V dc @ 1.0 A maximum present whenever ac input is applied |
| Module inhibit | Configured and controlled through I ² C |
| Output/output isolation | >1 MΩ, 500 V |
| Global inhibit/enable | TTL, Logic "1" and Logic "0"; configurable through I ² C |
| ENVIRONMENTAL | |
| Operating temperature | -40 °C to +70 °C ambient; derate each output 2.5% per degree from 50 °C to 70 °C; -20 °C start up |
| Storage temperature | -40 °C to +85 °C |
| Humidity | 10% to 95% RH, non-condensing |
| Vibration | IEC68-2-6 to the levels of IEC721-3-2 |
| MTBF demonstrated | >550,000 hr. @ full load, 220 V ac, 25 °C ambient |
| SAFETY | |
| Electromagnetic susceptibility | EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 |
| Conducted EMI | CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure |
| Radiated EMI | CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure |
| Certifications | 。 \$\mathbf{N}\$ us, UL/CSA 60950-1 2 nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 |
| OFNEDAL | |
| GENERAL | |
| Case specifications | SH30 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 1500 W–3210 W, 09 slots available, 6.2 lb. SH45 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 1800 W–4500 W, 14 slots available, 9.0 lb. |
| | |

Connectors

| Table 2: Ac Input | | | |
|--|------|----------------------|-------|
| | PIN# | FUNC | CTION |
| 1 ⊕ N 2 ⊕ ~ 3 ⊕ ⊕ | 1 | Ac neutral | Dc - |
| BARRIER TYPE | 2 | Ac line (hot) | Dc+ |
| SH30: THREE #6-32 B.H. SCREWS 6 inlb. (0.67 N-m) MAX. TORQUE SH45: THREE M4 SCREWS 7 inlb. (0.79 N-m) MAX. TORQUE | 3 | Chassis (earth) grou | und |

| Table 3: PFC Input Connector (Control & Signals) | | |
|---|------|--|
| Connector J1 | PIN# | FUNCTION |
| | 1 | Input ac OK (emitter) |
| 1 • • • • 5 | 2 | Input ac OK (collector) |
| 6 • • • • 10 | 3 | Global dc OK (emitter) |
| | 4 | Global dc OK (collector) |
| MATES WITH: | 5 | No connection |
| MOLEX 90142-0010 HOUSING | 6 | Global inhibit/optional enable logic "0" |
| MOLEX 90119-2110 TERMINAL CONNECTOR KIT AVAILABLE. PART | 7 | Global inhibit/optional enable logic "1" |
| NUMBER 70-841-004 | 8 | Global inhibit/optional enable return |
| | 9 | +5 VSB housekeeping (1 A max.) |
| | 10 | +5 VSB housekeeping return |

| Table 4: Dc Output Module Connector (Control & Signals) | | |
|---|------|---|
| Connector J1 | PIN# | FUNCTION |
| | 1 | + Remote sense (single or dual o/p main) |
| 1 • • • • 5 | 2 | Remote margin/V. program (single o/p) |
| 6 • • • • 10 | 3 | Margin high (single o/p) |
| MATES WITH: | 4 | - Remote sense/margin low (single or dual o/p main) |
| MOLEX 90142-0010 HOUSING | 5 | Spare |
| MOLEX 90119-2110 TERMINAL | 6 | Module isolated inhibit (single or dual o/p) |
| CONNECTOR KIT AVAILABLE, PART NUMBER 70-841-004 | 7 | Module inhibit return (single or dual o/p) |
| | 8 | Current share (SWP) (single or dual o/p main) |
| | 9 | + Remote sense V2 (dual o/p, single is spare) |
| | 10 | - Remote sense V2 (dual o/p, single is spare) |

| Table 5: I ² C Bus Output Connector | | | |
|---|------|-------------------------------|--|
| Connector J2 | PIN# | FUNCTION | |
| 40[| 1 | | |
| 10 • • • • 6 5 • • • • 1 | 2 | No connection | |
| | 3 | | |
| MATES WITH: | 4 | Serial clock signal (SCL) | |
| JST PHDR-10VS HOUSING | 5 | Serial data signal (SDA) | |
| JST SPHD-002T-P0.5 TERMINAL (FOR 24–28 AWG WIRE) | 6 | Address bit 0 (A0) | |
| JST SPHD-001T-P0.5 TERMINAL | 7 | Address bit 1 (A1) | |
| (FOR 24–28 AWG WIRE) <u>OR</u> LANDWIN 2050S1000 HOUSING | 8 | Address bit 2 (A2) | |
| LANDWIN 2053T011P TERMINAL | 9 | Secondary return (GND) | |
| CONNECTOR KIT AVAILABLE, PART NUMBER 70-841-023 | 10 | 5 VCC external bus (1 A max.) | |

NOTES:

- M4 x 8mm screws for all single output modules; maximum torque is 10 in.-lb. (1.13 N-m). M3 x 8mm screws for dual output module; maximum torque is 5 in.-lb. (0.57 N-m).
- 36 W triple output module mates with Molex 09-91-0600 housing and Molex 26-60-5060 terminal.
- Single and dual output modules have a green DC OK LED.

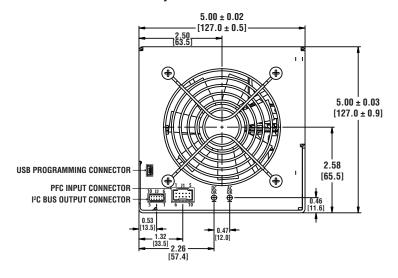
Installation/Safety Requirements

△ WARNING—RISK OF ELECTRICAL SHOCK

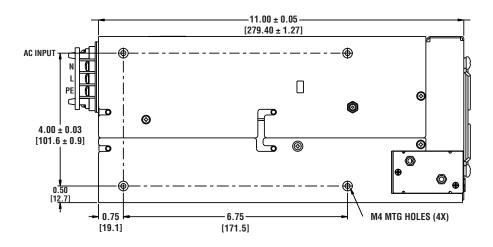
No user-serviceable parts. Do not open the power supply. Do not replace components.

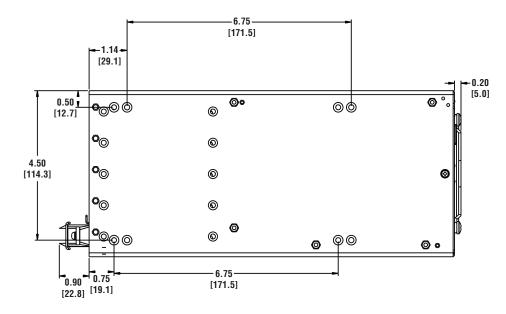
- The earth ground wire must be connected only to the point marked with the earth ground symbol (on the unit). If the earth ground wire is connected by a screw, the wire must have a ring terminal secured by a lock washer to prevent accidental loosening.
- A safety approved (e.g. UL, CSA, CE) power cord and plug, with an appropriate wire gauge for the rated input current, must be
 provided by the end system manufacturer. Additional ferrites may be required on the power cord for radiated emissions testing and
 are system dependent.
- The power supply must be installed in a properly grounded and shielded metal enclosure.
- An accessible disconnect device shall be installed external to the equipment.
- The power supply is CE marked following the provisions of the Low Voltage Directive 2006/95/EC only.
- Please refer to our Web site for additional information on the optional CANBUS/RS485 interface.

SH30 Series (1500/3210 W Maximum)



REVERSE AIRFLOW DIRECTION NORMAL AIRFLOW DIRECTION

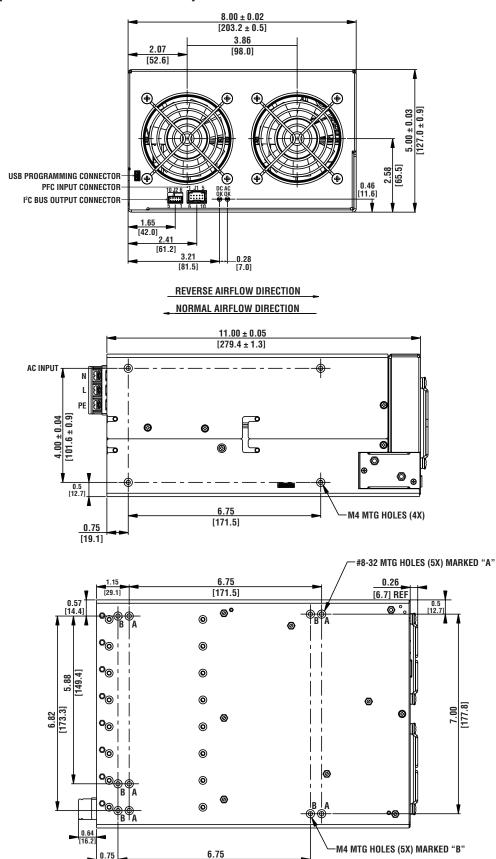




NOTES:

- M4 mounting holes on 3 sides; #8-32 mounting holes on the bottom. Maximum penetration is 0.155 in. (4.0 mm); maximum torque is 5 in.-lb. (0.57 N-m).
- All dimensions are typical, with inches and [millimeters] shown.

SH45 Series (1800/4500 W Maximum)



NOTES:

M4 mounting holes on 3 sides; #8-32 mounting holes on the bottom. Maximum penetration is 0.155 in. (4.0 mm); maximum torque is 5 in.-lb. (0.57 N-m).

[19.1]

[171.5]

All dimensions are typical, with inches and [millimeters] shown.



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S3H3 & S3H5 SERIES POWER SUPPLIES USER MANUAL

Specifications

| INPUT Input voltage range 17-261 V ac, three phase requestiony 47-261 V ac, three phase 48-261 V ac, three phase 48-261 V ac, three phase 49-261 V ac, three phase 49- | Table 1: Technical Specificati | ions | | |
|--|---------------------------------------|---|--|--|
| Input voltage range 170-264 V ac, three-phase requency 47-38 Pa 170-265 V ac, three-phase 170-265 V ac, three-phase 170-265 V ac, three-phase 170-265 V ac, three-phase 170-265 V ac, the load 170-265 V ac, the load 170-265 V ac, the load 170-265 V stable load 170- | | | | |
| Frequency 40 A peak maximum (soft start) Timush current 40 A peak maximum (soft start) Up to 55% at full load Power factor 10.95 typical As on 1.5 t bylical, inhibit/enable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-Op time 10 ms minimum As on 1.5 t bylical, inhibit/enable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-Op time 10 ms minimum As on 1.5 t bylical, inhibit/enable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-Op time 10 ms minimum As on 1.5 t bylical, inhibit/enable 150 ms typical, configurable through PC DUTPUT DUTPUT Dutput voltage range | - | 170–264 V ac three-phase | | |
| Interact current 40 A peak maximum (soft start) Elitidicary Up to 85% at full load Power factor 0,98 typical Ac on 1,5 s typical, inhibit/enable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-up time 10 ms minimum AC OK 35 ms early warning before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC Dutput voltage range a 10% minimum for all outputs, user-adjustable pot, full adjustment range using PC actions are point accuracy 13% Action of the point accuracy 13% Action of the point accuracy 14% Action of the point accuracy 14% Action of the point accuracy 15% Action of the point ac | | | | |
| Efficiency Up to 85% at full load Power factor D.98 typical Turn-on time Ac on 1.5 s typical, inhibitivenable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-up time A con 1.5 s typical, inhibitivenable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) Hold-up time A con 1.5 s typical, inhibitivenable 150 ms typical, configurable through PC OUTPUT OUT | | | | |
| Power factor D 98 typical. Inhibit/enable 150 ms typical, configurable through PC; 50 ms internal turn-on delay (dual output only) 10 ms minimum | | | | |
| Turn-on time Ac on 1.5 s typical, inhibit/enable 180 ms typical, configurable through PC; 80 ms internal turn-on delay (dual output only) 100-up time 100 ms minimum 100 ms minimum 100 ms do was early warming before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC 100 purpor and 190 ms do was early warming before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC 100 purpor and 190 ms do was early warming before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC 100 purpor and coursey 15% 100 purpor and coursey 15% 100 purpor program accuracy 15% 16% 16% 16% 16% 16% 16% 16% 16% 16% 16 | - | | | |
| Hold-up time 10 ms minimum AC OK 5 ms early warning before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC Output voltage range =10% minimum for all outputs, user-adjustable pot, full adjustment range using PC Ractory set point accuracy 1% PC output voltage range =10% minimum for all outputs, user-adjustable pot, full adjustment range using PC Ractory set point accuracy 25% Margining 4-4-8% nominal analog (single output module only) Line/load regulation 3, who r 20 m/ maximum; Pk-Pk-1.0% or 50 m/ maximum; bandwidth limited to 20 MHz Dynamic response 2, who r 100 m/ washimum; Pk-Pk-1.0% or 50 m/ maximum; bandwidth limited to 20 MHz Dynamic response 4, who r 100 m/ washimum; Pk-Pk-1.0% or 50 m/ maximum; bandwidth limited to 20 MHz Within 1% in -300 µs Single output module and main output of the dual output module 105-120% of rated output current. Aux output of dual output module 105-140% of rated output current. Special programmable CDP delay on 1500 W module from 100 ms to 25.5 s with shutdown features Configurable through CW with load ad callination required recept for 1500 W module. Short-cerul protection Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Single output module: 2-5 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6-80 x 11-10-120% Dial output module: 2-8 fs x 122-134%; 6 | | | | |
| AC OK Se me early warning before outputs lose regulation, full cycle ride at 50 Hz, configurable through PC Courtput voltage range | | | | |
| OUTPUT Output voltage range | · · · · · · · · · · · · · · · · · · · | | | |
| Output voltage range | | The carry maximing before carpain loss regulation, rain dysternation at our majoriting at able at long the | | |
| Factory set point accuracy 15% PC output program accuracy 15% PC output program accuracy 15% A-6% nominal analog (single output module only) Line/load regulation 10.4% or 20 mV maximum (15% maximum for 1500 W module) Ripple Ribbs. 0.13% or 10 mV maximum (15% maximum for 1500 W module) Ripple Ribbs. 0.13% or 10 mV maximum; Pk-Pk: 1.0% or 50 mV maximum; bandwidth limited to 20 MHz 2-2% or 100 mV with 25% load step Recovery time Within 15% in -300 us Single output module and main output of the dual output module 105-120% of rated output current. Aux output of dual output module 105-120% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shutdown features configurable through Pkc with load calibration required (except for 1500 W module). Short-circuit protection Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Configurable through Pkc Overvoltage protection Thermal protection Remote sense Up to 0.5 V drop (not available on the internal temperature exceeds the safe operating range; configurable through Pkc Up to 0.5 V drop (not available on triple output module) Corner share to within 25% of total rated current Do Co K 4.5% of nominal, configurable through Pkc Minimum load Not required Module inhibit Configured and controlled through Pkc Output/output isolation Collobal inhibit/mable Tit, Logic "1" and Logic "0"; configurable through Pkc ENVIRONMENTAL Operating temperature 1-40 "C to 70" C ambient, derate each output 2.5% per degree from 50 "C to 70 "C, -20 "C start up Storage temperature 1-40 "C to 70" C ambient, derate each output 2.5% per degree from 50 "C to 70 "C, -20 "C start up Storage temperature 1-40 "C to 70" C ambient, derate each output 2.5% per degree from 50 "C to 70 "C, -20 "C start up Storage temperat | | +10% minimum for all outputs, user-adjustable not, full adjustment range using I ² C. | | |
| PC output program accuracy 2.5% | | | | |
| Margining x4-6% nominal analog (single output module only) Lina/load regulation 0.4% or 20 mV maximum (1% maximum for 1500 W module) Ripple RMS: 0.1% or 10 mV maximum; Pk-Rk: 1.0% or 50 mV maximum; bandwidth limited to 20 MHz Dynamic response <2% or 100 mV with 25% load step Recovery time Within 1% in <300 µs Single output module and main output of the dual output module 105-120% of rated output current. Aux output of dual output module 105-120% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shutdown features Configurable through Pic With load calibration required (except for 1500 W module). Short-circuit protection Protection Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Single output module: 2-5.5 V, 122-134%; 6-80 V, 110-120% Dual output module: 2-5.5 V, 122-134%; 6-80 V, 110-120% Thermal protection All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through PiC Thermal protection All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through PiC Use 10.5 V dors (not available on triple output module) Single wire parallel Current share to within 2% of total rated current 2.5% of nominal; configurable through PiC Housekeeping bias voltage Module inhibit Cenfigured and controlled through PiC Output/output isolation J Mort required Output/output isolation J Mort required 3.74 Mort 10.0 Housekeeping bias voltage Wide and controlled through PiC With this provided output isolation J Mort required 3.75 Mort required 3.76 C to 170 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up 3.75 Mort Remonstrated Science T and Logic "0"; configurable through PiC With retaining the provided of the levels of IEC721-3-2 WITE Genomstrated 3.75 Mort Remonstrated Science T and Logic "0"; configurable through PiC Certifications 3.75 Mort Remonstrated 3.7 | | | | |
| Line/fload regulation 0.4% or 20 mV maximum (19% maximum for 1500 W module) RMS: 0.1% or 10 mV maximum; Pk-Pk: 1.0% or 50 mV maximum; bandwidth limited to 20 MHz Dynamic response 22% or 100 mV with 25% load step Recovery time Within 19% in .300 µs Single output module and main output of the dual output module 105–120% of rated output current. Aux output of dual output module 105–140% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shuldown features Configurable through PC with load calibration required (except for 1500 W module). Protected for continuous short-circuit, recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Single output module: 2–6. V 122–134%; 6–80 V, 110–120% Dual output module: 2–6. V 122–134%; 6–80 V, 110–120% Tiple output module: 2–6. V 1 | | | | |
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| Overcurrent protection Single output module and main output of the dual output module 105-120% of rated output current. Aux output of dual output module 105-140% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shutdown features Configurable through IP C with load calibration required (except for 1500 W module). Short-circuit protection Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. Single output module: 2-6 V, 122-134%; 8-28 V 110-120% Tiple output module: 2-6 V, 122-134%; 8-28 V 110-120% Tiple output module: 2-6 V, 122-134%; 8-28 V 110-120% Tiple output module: No evervoltage protection provided Configurable through IPC All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through IPC ODC M. ±5% of nominal; configurable through IPC Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through IPC Output/output isolation TIT., Logic "1" and Logic "0"; configurable through IPC Output/output isolation TIT., Logic "1" and Logic "0"; configurable through IPC ENVIRONMENTAL Operating temperature -40 "C to +70 "C ambient, derate each output 2.5% per degree from 50 "C to 70 "C, -20 "C start up Storage temperature -40 "C to +85 "C Humidity 10% to 95% RH, non-condensing Vibration IEC88-2-6 to the levels of IEC721-3-2 Wither Genostrated >550,000 hr. @ full load, 220 V ac, 25 "C ambient Radiated EMI CISPR 22/ENS5022 Level B when installed in a property grounded and shielded metal enclosure Certifications SHIs, UL/CSA 60950-1 2" Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 SCHERLA SHIS, UL/CSA 60950-1 2 Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 SCHERLA SHIS, SHI | | | | |
| Single output module: 2–5,5 V, 122–134%; 6–60 V, 110–120% | Overcurrent protection | Single output module and main output of the dual output module 105–120% of rated output current. Aux output of dual output module 105–140% of rated output current. Special programmable OCP delay on 1500 W module from 100 ms to 25.5 s with shutdown features. | | |
| Dual output module: 2-6 k y 122–134%, 8–28 k y 110–120% Triple output module: No overvoltage protection provided Configurable through PC All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through PC Remote sense Up to 0.5 b v drop (not available on triple output module) Single wire parallel Current share to within 2% of total rated current DC OK ±5% of nominal; configurable through PC Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Configured and controlled through PC Output/output isolation >1 MC, 500 V Global inhibit/ and Logic "1" and Logic "0"; configurable through PC ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration 16C68-2-6 to the levels of 16C721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility Electromagnetic susceptibility CiSPR 22/EN55022 Level B when installed in a property grounded and shielded metal enclosure Radiad EMI CiSPR 22/EN55022 Level B when installed in a property grounded and shielded metal enclosure Certifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 279.4 mm], 4920 W, 14 slots available, 6.0 lb. S4H5 W triple: 0.5 lb. Module weights | Short-circuit protection | Protected for continuous short-circuit; recovery is automatic upon removal of short. Shutdown mode available on the 1500 W module. | | |
| Remote sense Up to 0.5 V drop (not available on triple output module) Single wire parallel Current share to within 2% of total rated current DC OK ±5% of nominal; configurable through PC Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through PC Output/output isolation >1 MC, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through PC ENVIRONMENTAL Operating temperature -40 "C to +70 "C ambient, derate each output 2.5% per degree from 50 "C to 70 "C, -20 "C start up Storage temperature -40 "C to +85 "C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 "C ambient SAFETY Electromagnetic susceptibility COnducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications SH, UL/CSA 60950-1 2"d Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications SH3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. SH5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Hodule weights 10 to 1.5% of total rated current 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Overvoltage protection | Dual output module: 2–6 V, 122–134%; 8–28 V, 110–120% Triple output module: No overvoltage protection provided | | |
| Single wire parallel Current share to within 2% of total rated current DC OK ±5% of nominal; configurable through I°C Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through I°C Output/output isolation > 1 MΩ, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through I°C ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. 3H5 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 279.4 mm], 290 W, 14 slots available, 9.0 lb. Module weights Current share to within 2% of total rated current Minimum load Not required Not required Adv C to 1.0 Not point in a properly grounded and shielded metal enclosure Certifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. 3H5 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights | Thermal protection | All outputs are disabled when the internal temperature exceeds the safe operating range; configurable through I ² C | | |
| DC OK ±5% of nominal; configurable through IFC Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through IFC Output/output isolation >1 MΩ, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through IFC ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications -71 m, UL/CSA 60950-1 2 nd Edition, CE to IVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in, x 5 in, x 11 in, [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in, x 8 in, x 11 in, [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 2 10 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Remote sense | Up to 0.5 V drop (not available on triple output module) | | |
| Minimum load Not required Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through I°C Output/output isolation >1 MΩ, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through I°C ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights Module weights | Single wire parallel | Current share to within 2% of total rated current | | |
| Housekeeping bias voltage 5 V dc @ 1.0 A maximum present whenever ac input is applied Module inhibit Configured and controlled through I ² C Output/output isolation >1 MΩ, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through I ² C ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications | DC OK | ±5% of nominal; configurable through I ² C | | |
| Module inhibit Configured and controlled through IPC Output/output isolation >1 MΩ, 500 V Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through IPC ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications -M, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights Roding inhibit/enable TTL, Logic "1" and Logic "0.5 lb.; 144 W dual: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; | Minimum load | Not required | | |
| Output/output isolation | Housekeeping bias voltage | 5 V dc @ 1.0 A maximum present whenever ac input is applied | | |
| Global inhibit/enable TTL, Logic "1" and Logic "0"; configurable through I°C ENVIRONMENTAL Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications | Module inhibit | Configured and controlled through I ² C | | |
| Poperating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-5, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Output/output isolation | >1 MΩ, 500 V | | |
| Operating temperature -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications | Global inhibit/enable | TTL, Logic "1" and Logic "0"; configurable through I ² C | | |
| Storage temperature -40 °C to +85 °C Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications Certifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | ENVIRONMENTAL | | | |
| Humidity 10% to 95% RH, non-condensing Vibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-5, Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications CHILL, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Operating temperature | -40 °C to +70 °C ambient, derate each output 2.5% per degree from 50 °C to 70 °C, -20 °C start up | | |
| Wibration IEC68-2-6 to the levels of IEC721-3-2 MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications □Nus, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Storage temperature | | | |
| MTBF demonstrated >550,000 hr. @ full load, 220 V ac, 25 °C ambient SAFETY Electromagnetic susceptibility EN61000-4-2, EN61000-4-5, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications □Nus, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Humidity | 10% to 95% RH, non-condensing | | |
| Electromagnetic susceptibility EN61000-4-2, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications CERTIFICATION OF THE STREET | Vibration | IEC68-2-6 to the levels of IEC721-3-2 | | |
| Electromagnetic susceptibility EN61000-4-2, EN61000-4-4, EN61000-4-5 Level 3 Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications cRiss, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | MTBF demonstrated | >550,000 hr. @ full load, 220 V ac, 25 °C ambient | | |
| Conducted EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications Lack Bus, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | SAFETY | | | |
| Radiated EMI CISPR 22/EN55022 Level B when installed in a properly grounded and shielded metal enclosure Certifications Lus, UL/CSA 60950-1 2nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 GENERAL S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Electromagnetic susceptibility | | | |
| Certifications CERTIFICATION CERT | Conducted EMI | | | |
| GENERAL Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Radiated EMI | 1 1 70 | | |
| Case specifications S3H3 Series: 5 in. x 5 in. x 11 in. [127.0 mm x 127.0 mm x 279.4 mm], 3210 W, 09 slots available, 6.0 lb. S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | Certifications | ₽№ us, UL/CSA 60950-1 2 nd Edition, CE to LVD 2006/95/EC, EN60950-1/A11:2009 | | |
| S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. Module weights S3H5 Series: 5 in. x 8 in. x 11 in. [127.0 mm x 203.2 mm x 279.4 mm], 4920 W, 14 slots available, 9.0 lb. 210 W single: 0.6 lb.; 360 W single: 1.0 lb.; 600 W single: 2.0 lb.; 750 W single: 1.6 lb.; 1500 W single: 2.0 lb.; 144 W dual: 0.6 lb.; 36 W triple: 0.5 lb. | GENERAL | | | |
| Module Weights 36 W triple: 0.5 lb. | Case specifications | | | |
| Limited warranty 3 years | Module weights | | | |
| | Limited warranty | 3 years | | |

Connectors

| Table 2: Ac Input | | | |
|--|------|------------------------|--|
| S3H3 S3H5 | PIN# | FUNCTION | |
| 1 | 1 | Line 1 | |
| 3 ⊕ L3 4 3 2 1 4 ⊕ ⊕ | 2 | Line 2 | |
| BARRIER TYPE S3H3: FOUR M3 SCREWS S3H5: THREE M3.5 SCREWS 6 inlb. (0.67 N-m) MAX. TORQUE | 3 | Line 3 | |
| 6 IIIID. (0.07 N-III) IVIAX. TORQUE | 4 | Chassis (earth) ground | |

| Table 3: PFC Input Connector (Control & Signals) | | |
|---|------|--|
| Connector J1 | PIN# | FUNCTION |
| | 1 | Input ac OK (emitter) |
| 1 • • • • 5 | 2 | Input ac OK (collector) |
| 6 • • • • 10 | 3 | Global dc OK (emitter) |
| | 4 | Global dc OK (collector) |
| MATES WITH: | 5 | No connection |
| MOLEX 90142-0010 HOUSING | 6 | Global inhibit/optional enable logic "0" |
| MOLEX 90119-2110 TERMINAL CONNECTOR KIT AVAILABLE, PART | 7 | Global inhibit/optional enable logic "1" |
| NUMBER 70-841-004 | 8 | Global inhibit/optional enable return |
| | 9 | +5 VSB housekeeping (1 A max.) |
| | 10 | +5 VSB housekeeping return |

| Table 4: Dc Output Module Connector (Control & Signals) | | | |
|--|------|---|--|
| Connector J1 | PIN# | FUNCTION | |
| | 1 | + Remote sense (single or dual o/p main) | |
| 1 • • • • 5 | 2 | Remote margin/V. program (single o/p) | |
| 6 • • • • 10 | 3 | Margin high (single o/p) | |
| MATEC MITH | 4 | - Remote sense/margin low (single or dual o/p main) | |
| MATES WITH: MOLEX 90142-0010 HOUSING MOLEX 90119-2110 TERMINAL CONNECTOR KIT AVAILABLE, PART NUMBER 70-841-004 | 5 | Spare | |
| | 6 | Module isolated inhibit (single or dual o/p) | |
| | 7 | Module inhibit return (single or dual o/p) | |
| | 8 | Current share (SWP) (single or dual o/p main) | |
| | 9 | + Remote sense V2 (dual o/p, single is spare) | |
| | 10 | - Remote sense V2 (dual o/p, single is spare) | |

| Table 5: I ² C Bus Output Connector | | | |
|---|------|-------------------------------|--|
| Connector J2 | PIN# | FUNCTION | |
| 40[[| 1 | | |
| 10 • • • • 6 | 2 | No connection | |
| | 3 | | |
| MATES WITH: | 4 | Serial clock signal (SCL) | |
| JST PHDR-10VS HOUSING | 5 | Serial data signal (SDA) | |
| JST SPHD-002T-P0.5 TERMINAL (FOR 24–28 AWG WIRE) | 6 | Address bit 0 (A0) | |
| JST SPHD-001T-P0.5 TERMINAL | 7 | Address bit 1 (A1) | |
| (FOR 24–28 AWG WIRE) <u>OR</u> LANDWIN 2050S1000 HOUSING | 8 | Address bit 2 (A2) | |
| LANDWIN 2053T011P TERMINAL | 9 | Secondary return (GND) | |
| CONNECTOR KIT AVAILABLE, PART NUMBER 70-841-023 | 10 | 5 VCC external bus (1 A max.) | |

NOTES:

- M4 x 8mm screws for all single output modules; maximum torque is 10 in.-lb. (1.13 N-m). M3 x 8mm screws for dual output module; maximum torque is 5 in.-lb. (0.57 N-m).
- 36 W triple output module mates with Molex 09-91-0600 housing and Molex 26-60-5060 terminal.
- Single and dual output modules have a green DC OK LED.

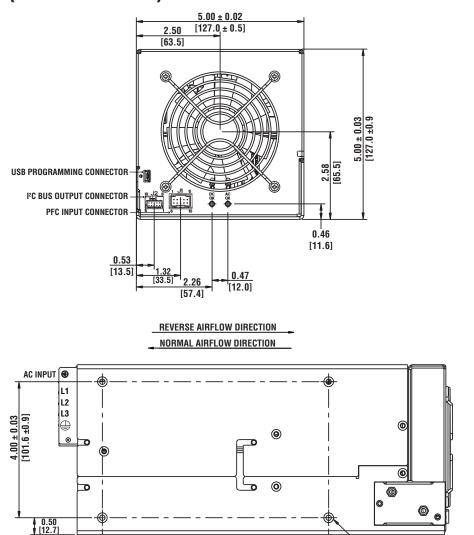
Installation/Safety Requirements

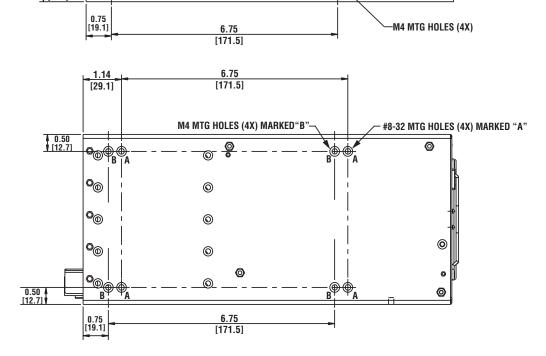
△ WARNING-RISK OF ELECTRICAL SHOCK

No user-serviceable parts. Do not open the power supply. Do not replace components.

- The earth ground wire must be connected only to the point marked with the earth ground symbol (on the unit). If the earth ground wire is connected by a screw, the wire must have a ring terminal secured by a lock washer to prevent accidental loosening.
- A safety approved (e.g. UL, CSA, CE) power cord and plug, with an appropriate wire gauge for the rated input current, must be
 provided by the end system manufacturer. Additional ferrites may be required on the power cord for radiated emissions testing and
 are system dependent.
- The power supply must be installed in a properly grounded and shielded metal enclosure.
- An accessible disconnect device shall be installed external to the equipment.
- The power supply is CE marked following the provisions of the Low Voltage Directive 2006/95/EC only.
- Please refer to our Web site for additional information on the optional CANBUS/RS485 interface.

S3H3 Series (3210 W Maximum)

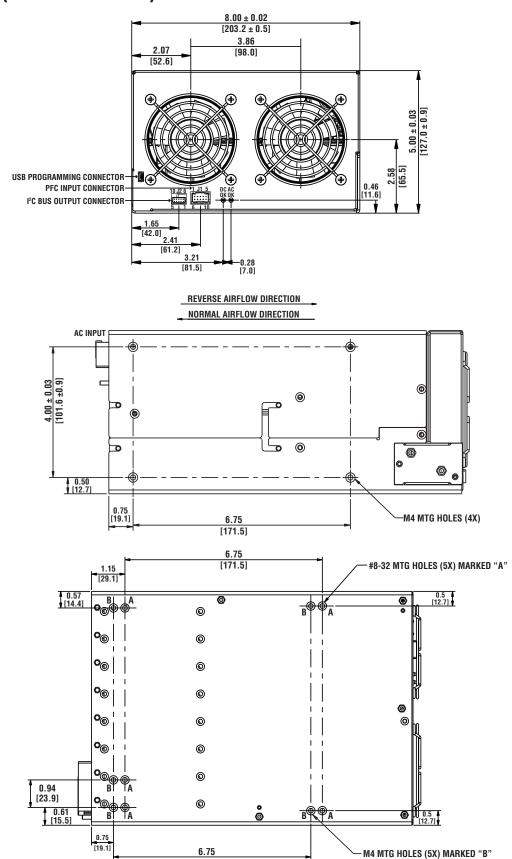




NOTES:

- M4 mounting holes on 3 sides; #8-32 mounting holes on the bottom. Maximum penetration is 0.155 in. (4.0 mm); maximum torque is 5 in.-lb. (0.57 N-m).
- All dimensions are typical, with inches and [millimeters] shown.

S3H5 Series (4920 W Maximum)



NOTES:

- M4 mounting holes on 3 sides; #8-32 mounting holes on the bottom. Maximum penetration is 0.155 in. (4.0 mm); maximum torque is 5 in.-lb. (0.57 N-m).
- All dimensions are typical, with inches and [millimeters] shown.



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